

SDG 17

PARTNERSHIP
FOR THE
GOALS



ANNUAL REPORT 2024-25

17 PARTNERSHIPS
FOR THE GOALS



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Sustainable Development Goal 17: Partnerships for the Goals (Academic Year 2024–25)

Sustainable Development Goal 17 emphasizes the importance of partnerships to achieve all other SDGs — by mobilizing resources, sharing knowledge, and fostering collaboration across sectors and nations.

Brainware University views partnership not as an event, but as a continuous process of co-creation — uniting academia, industry, government, and community in a shared vision of sustainable development.

The academic year **2024–25** marked a significant expansion in Brainware University’s partnership ecosystem, spanning **international collaborations, government-funded projects, industry linkages, and rural development programmes.**

Through these initiatives, Brainware positioned itself as a knowledge hub connecting research, innovation, and social transformation.

Institutional Vision for SDG 17

Brainware University’s **Strategic Plan (2023–28)** commits explicitly to strengthening multi-stakeholder partnerships aligned with the UN 2030 Agenda.

Its partnership framework rests on three pillars:

1. **Academic and Research Cooperation** – advancing science, technology, and innovation through shared expertise.
2. **Government and Policy Linkages** – mobilizing institutional resources for national missions like Unnat Bharat Abhiyan (UBA), MSME, and DSTBT.
3. **Community and Industry Engagement** – co-developing sustainable, locally relevant solutions in health, agriculture, and technology.

These alliances reinforce the University’s broader commitment to SDG integration across curriculum, research, and outreach.

Partnership Portfolio Overview (2024–25)

In 2024–25, Brainware University expanded its partnership network to **over 50 national and international institutions** across academia, research, and industry.

Category	No. of Active MoUs	Key Partners	Focus Areas
International Universities	7	Hanyang University (Korea), University of South Carolina (USA), INTA (Argentina), Sejong University (Korea), Kasama University (Zambia),	Research, training, innovation, mobility

		Fraunhofer IIS (Germany), Livingstone College (USA)	
Government & Funding Agencies	5	DSTBT, ICMR, MSME, WBPCB, MoE FCC	R&D funding, climate and health projects
Industry & Innovation Bodies	10+	Eco Fast Agri Solution, SWADES, SDF, MSME India	Incubation, entrepreneurship, sustainable product development
Community Partners (UBA Villages)	5	Faldi, Dubgaria, Chaturia, Panshila, Chak Barbaria	Rural livelihood, bio-waste recycling, sanitation
Research Networks	3	UBA (MoE), SERB-DST, WBPCB	Joint project execution and publication

This structure reflects Brainware's focus on bridging local relevance with global engagement.

International Academic Collaborations

The University strengthened its global footprint through long-term academic alliances promoting **student exchange, faculty mobility, and joint research**.

Key MoUs Signed or Active in 2024–25:

Partner Institution	Country	Duration	Key Objectives
Fraunhofer IIS	Germany	2025–27	Joint research in computational sciences and AI applications
University of South Carolina	USA	2025–30	Collaborative biotechnology research and student training
INTA (Instituto Nacional De Tecnología Agropecuaria)	Argentina	2024–29	Joint R&D, staff and student exchange, seminars, and equipment sharing
Hanyang University	Republic of Korea	2024–29	Research exchange in biotechnology and analytical instrumentation
Kasama University College of Health Science and Technology	Zambia	2024–29	Health science collaboration, online learning initiatives
Sejong University	Republic of Korea	2024–29	Joint research programs and faculty exchange
Livingstone College	USA	2021–26	Exchange of students, research collaboration, joint conferences

These partnerships expanded Brainware's capacity for **interdisciplinary global research** and **cross-cultural academic learning**, particularly in biotechnology, health, and computational sciences.

Government-Funded Collaborative Projects

Brainware University SDG Annual Report 2024-25

In line with SDG 17.17 (multi-stakeholder partnerships), Brainware successfully executed several **government-funded research collaborations** across ministries and departments:

Project	Department	Funding Agency	Amount (₹ Lakhs)	Duration
Surveillance of Wetland Water Quality	Biotechnology	DSTBT, West Bengal	24.75	3 Years
Groundwater Quality and Citizen Science	Chemistry, Psychology	WBPCB	11.59	1 Year
AI-based Lung Cancer Detection	Computational Sciences	ICMR, Govt. of India	66	3 Years
Compact Objects with Quintessence Field	Mathematics	DSTBT, West Bengal	13.6	3 Years
Sustainable Hydrogel Wound Dressing	Pharma	MoEFCC	1.5	1 Year
Bioinsecticide for Crop Protection	Agriculture	MoE (UBA)	1	1 Year
Solar Street Lighting for Rural Areas	CSE + ECE	MoE (UBA)	1	1 Year

Collectively, these projects represent more than **₹120 lakh in external funding**, affirming Brainware's credibility as a national partner in sustainable research.

University-Funded and Seed Grant Collaborations

Brainware's internal **Seed Grant Scheme (2024–25)** encouraged inter-departmental collaboration and innovation with measurable societal outcomes.

Representative Projects:

- **Solar Energy Integration (ECE):** ₹47.84 lakh – Renewable energy infrastructure on campus.
- **Grid-Connected Photovoltaic System (EE):** ₹36.45 lakh – Sustainable power generation and monitoring.
- **Solid Waste Management Practices (Biotech):** ₹3.5 lakh – Waste-to-resource model for educational institutions.
- **Sustainable Food Packaging (Biotech):** ₹0.75 lakh – Biodegradable alternatives using PLA/chitosan.

These projects not only advance research but also serve as **living laboratories** for students to experience sustainable problem-solving in real contexts.

Industry and Innovation Partnerships

Through its **Innovation and Incubation Cell**, Brainware University worked closely with MSME and local enterprises to translate research into applications.

Key Collaborations:

MSME-Funded Innovations (2024–25):

- *Smart Building using IoT* – ₹11 lakh
- *Fresh Flow: Water Surface Cleaning Device* – ₹12 lakh
- *EcoLink Biodegradable Craft Material* – ₹12 lakh
- *Microalgae-based Renewable Energy Equipment* – ₹12 lakh
- *Farm Stubble Management System* – ₹10.7 lakh

Each project included mentorship from faculty experts and resulted in patent filings or technology prototypes.

The University also conducted **Innovation Week 2025**, featuring 30 student startups and 100+ participants, showcasing MSME- and IIC-supported innovations.

Community and Rural Partnerships

Brainware's **Unnat Bharat Abhiyan (UBA)** activities directly contribute to SDG 17's focus on community-level partnerships.

Under the guidance of the Ministry of Education, the University adopted **five villages** — Faldi, Dubgaria, Chaturia, Panshila, and Chak Barbaria — to implement sustainable development interventions.

Major Projects (2024–25):

- Water hyacinth-based organic manure development for sustainable farming.
- Nanofiltration-based water purification units made from recycled waste.
- School kitchen gardens promoting nutrition and waste management.
- Safe drinking water workshops for disease prevention.
- Bioinsecticide production using native plants.

Research Collaborations and Joint Publications

Collaborative research output increased significantly in 2024–25, with **over 50 Scopus-indexed papers** involving joint authorship across disciplines and institutions.

Themes included:

- Environmental pollution and mitigation (Biotech, Chemistry)
- Health diagnostics using AI (Computational Sciences)
- Sustainable packaging and bio-degradation (Biotech)
- Law and mental health (School of Law)
- Cybersecurity and data ethics (CSE-AI)

This cross-institutional research culture reinforces Brainware's academic partnerships as engines of SDG-oriented knowledge creation.

International Mobility and Capacity Building

The Office of International Relations facilitated:

- **Faculty Exchange:** 10 visiting faculty from partner universities (Hanyang, Sejong, South Carolina).
- **Student Exchange:** 5 outbound and 8 inbound students in 2024–25 under short-term mobility programmes.
- **Virtual Joint Seminars:** Conducted 6 online workshops on AI, sustainability, and law.
- **Global Lecture Series:** Hosted by experts from USA, Korea, and Germany on interdisciplinary research collaboration.

These initiatives fostered intercultural competence, research collaboration, and professional skill development among Brainware’s students and staff.

SDG-Aligned Patents and Technology Transfer

Patents filed in 2024–25 reflected Brainware’s growing technological contribution to sustainability partnerships.

Examples include:

- *AI-Based Food Safety Prediction Tool* – Hospital Management
- *IoT-Enabled Smart Waste Management Bin* – CSE
- *Automated Mycobacterial Detection System* – ECE
- *AI-Based Solar Agricultural Robot* – CSE-DSCS
- *Bioinsecticide Production Systems* – Biotechnology

Many of these innovations were co-developed with external partners or incubated under MSME schemes — strengthening the **research-to-market** partnership chain.

Brainware University’s journey in 2024–25 demonstrated that meaningful partnerships are built on shared purpose and sustained commitment.

Through international collaborations, government alliances, industry linkages, and grassroots outreach, the University has positioned itself as a catalyst for multi-sectoral progress.

Its partnerships are not transactional—they are transformational, aimed at co-creating solutions that align with both **India’s national missions** and the **United Nations Sustainable Development Goals**.

The University’s success in integrating global research with local relevance proves that **“Partnerships for the Goals”** is not merely an aspiration but an institutional ethos — one that transforms knowledge into collective progress, innovation into inclusion, and education into empowerment for all.